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## UNITED STATES PATENT AND TRADEMARK OFFICE

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# BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/081,419 Filing Date: February 22, 2002

Appellant(s): WILLIAMS, DWIGHT

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**Group 3700** 

Sue Z. Shaper For Appellant

**EXAMINER'S ANSWER** 

This is in response to the appeal briefs filed October 1, 2006 and November 1, 2006 appealing from the Office action mailed June 30, 2006.

## (1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

## (2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings, which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

## (3) Status of Claims

The statement of the status of claims contained in the brief is incorrect. A correct statement of the status of the claims is as follows:

This appeal involves claims 1, 2, 5-9, 13 and 15-17.

Claims 3, 4, 10-12 and 14 are withdrawn from consideration as not directed to the elected species.

Applicant incorrectly indicates that all pending claims are rejected, claims 1-17 are pending, only claims 1, 2, 5-9, 13 and 15-17 are rejected.

Applicant incorrectly indicates that all claims are on appeal, only claims 1, 2, 5-9, 13 and 15-17 are on appeal.

Applicant incorrectly indicates that claims 1 and 17 are independent method claims, claims 1 and 17 are independent apparatus claims.

#### (4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is incorrect.

The amendment after final rejection filed on August 18, 2006 has not been entered.

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The examiner disagrees with applicant's traversal. The traversal of the amendment after final rejection not being entered cannot be made at this point of prosecution. This is a petitionable issue only.

# (5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

However, the examiner finds the information concerning the clarification of distinction between "Standard Pumps" and "Fire Fighting Pumps" to be extraneous and not related to the claimed subject matter. Since applicant is claiming a standard pump, provides evidence and argues that standard pumps are not provided with 2-1/2 inch or pony inlets, it is not clear to the examiner the benefit of including such language, "but no special 2-1/2 inch inlet" in the claims. The point explaining the difference between "Standard Pumps" and "Fire Fighting Pumps" appears moot since if applicant is claiming a standard pump that inherently does not include a 2-1/2 inch inlet, then it is redundant to include such language in the claims and does not fully capture what applicant considers to be the limitation.

#### (6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

#### (7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

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## (8) Evidence Relied Upon

4,234,044	HOLLAN et al.	11-1980
4,503,915	GAGLIARDO et al.	3-1985
5,829,533	WILLIAMS	11-1998
5,398,765	WORTHINGTON	3-1995

## (9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

#### Claim Rejections - 35 USC § 112

- 1. The following is a quotation of the second paragraph of 35 U.S.C. 112:
  - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 2. Claims 1, 2, 5-8, 13, 16 and 17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In view of applicant's comments filed March 22, 2006, claims 1, 2, 5-8 and 17, recite both an apparatus(i.e. a fire fighting system) and the method steps of using the apparatus to fight a fire. It is not clear if applicant is claiming an apparatus type claim or a method type claim. The preamble is in apparatus form and would not be understood as "A method of using a fire fighting system comprising the steps of" or "A method of fighting a fire comprising the steps of".

Claims 5 and 13 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting

to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are between the location of the line leading from the reservoir outlet to the water manifold inlet and the suction side of the pump. The claims do not positively recite the connection(i.e. essential structural cooperative relationship) of the water manifold inlet with the line. In claim 5, language such as --the pump water manifold inlet on--should be inserted after the phrase "the reservoir outlet to". In claim 13, language such as --the pump water manifold inlet on-- should be inserted after the word "and".

#### Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1, 2, 5-8 and 17 rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claims are directed to neither a "process" nor a "machine," but rather embrace or overlap two different statutory classes of invention set forth in 35 U.S.C. 101 which is drafted so as to set forth the statutory classes of invention in the alternative only.

# Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1, 2, 5-9, 13 and 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hollan et al in view of Williams.

Hollan et al shows a fire fighting system comprising a pump 33; an around-the-pump system comprising a fitting at 29, a water manifold inlet 30, a line 31 on the suction side of the pump, an injection jet pump 26, a line 40 on the discharge side of the pump and a water additive including a foam concentrate 17, except for the location of the fitting upstream of the water manifold inlet, the size of the pump and the reservoir water source. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the fitting upstream of the water manifold inlet, since the drawing only shows a schematic drawing and the location of the fitting could be located upstream of the water manifold inlet without effecting the operation of the Hollan et al apparatus. Williams shows a fire fighting system using a 2000 or greater gpm pumps to fight fires. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a 2000 or greater gpm pump in the apparatus of Hollan et al, since such a modification would depend on the hazard being protected and one in the fire protection art would choose the appropriate fire pump suitable for the hazard being protected. Also, Williams teaches that such pumps are available in the fire fighting art and such pumps could be used in the system of Hollan et al.

As to the large water reservoir, note that Hollan et al discloses that the system can be used in areas where there are no water supply mains, for example in forest fires in rugged impassable terrain and that the system can be transported swiftly from site to site. It is known in the fire protection art when fighting forest fires that reservoirs such as lakes or ponds are readily

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used as a main source of water supply and would normally be used in the apparatus of Hollan et al in that situation.

Note the addition of "but no special approximately 2-1/2 inch inlet" is considered a negative limitation and does not appear to further limit the claim. The pumps of Hollan et al and Williams are not provided with any special approximately 2-1/2 inch inlets and therefore meet the claim limitation. It is also not clear if this "2-1/2 inch inlet" is further defining the size of the water manifold inlet or how it is related to the remainder of the claims since there are no limitations claimed between this inlet and the fitting and the around-the-pump system. If it is further defining the size of the water manifold inlet, then such an inlet would be chosen depending on the size of the pump designed.

6. Claims 1, 2, 5-9, 13 and 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hollan et al in view of Worthington.

Hollan et al shows a fire fighting system comprising a pump 33; an around-the-pump system comprising a fitting at 29, a water manifold inlet 30, a line 31 on the suction side of the pump, an injection jet pump 26, a line 40 on the discharge side of the pump and a water additive including a foam concentrate 17, except for the location of the fitting upstream of the water manifold inlet, the size of the pump and the reservoir water source. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the fitting upstream of the water manifold inlet, since the drawing only shows a schematic drawing and the location of the fitting could be located upstream of the water manifold inlet without effecting the operation of the Hollan et al apparatus. Worthington teaches using pumps up 10,000 gpm in fire fighting systems and using reservoirs as water sources. It would have been obvious to one

having ordinary skill in the art at the time the invention was made to provide a 2000 or greater gpm pump in the apparatus of Hollan et al, since such a modification would depend on the hazard being protected and one in the fire protection art would choose the appropriate fire pump suitable for the hazard being protected. Also, Worthington teaches that such pumps are available in the fire fighting art and such pumps could be used in the system of Hollan et al.

As to the large water reservoir, note that Hollan et al discloses that the system can be used in areas where there are no water supply mains and where fire trucks cannot be moved over land to the point of need, for example in forest fires in rugged impassable terrain and that the system can be transported swiftly from site to site. It is known in the fire protection art when fighting forest fires that reservoirs such as lakes or ponds are readily used as a main source of water supply and would normally be used in the apparatus of Hollan et al in that situation. Also, Worthington teaches that when water pumper fire truck vehicles are not available, they may be replaced by other water supplies such as reservoirs.

Note the addition of "but no special approximately 2-1/2 inch inlet" is considered a negative limitation and does not appear to further limit the claim. The pumps of Hollan et al and Worthington are not provided with any special approximately 2-1/2 inch inlets and therefore meet the claim limitation. It is also not clear if this "2-1/2 inch inlet" is further defining the size of the water manifold inlet or how it is related to the remainder of the claims since there are no limitations claimed between this inlet and the fitting and the around-the-pump system. If it is further defining the size of the water manifold inlet, then such an inlet would be chosen depending on the size of the pump designed.

7. Claims 1, 2, 5, 6, 8, 9, 13 and 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gagliardo et al in view of Williams.

Gagliardo et al shows a fire fighting system comprising a pump 11; an around-the-pump system comprising a fitting at connection of line 10 at 13, a water manifold inlet 12, a line 13 on the suction side of the pump, an injection jet pump 27, a line 14 on the discharge side of the pump and a water additive including a foam concentrate 23, except for the size of the pump. Williams shows a fire fighting system using a 2000 or greater gpm pumps to fight fires. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a 2000 or greater gpm pump in the apparatus of Gagliardo et al, since such a modification would depend on the hazard being protected and one in the fire protection art would choose the appropriate fire pump suitable for the hazard being protected. Also, Williams teaches that such pumps are available in the fire fighting art and such pumps could be used in the system of Gagliardo et al.

Note the addition of "but no special approximately 2-1/2 inch inlet" is considered a negative limitation and does not appear to further limit the claim. The pumps of Gagliardo et al and Williams are not provided with any special approximately 2-1/2 inch inlets and therefore meet the claim limitation. It is also not clear if this "2-1/2 inch inlet" is further defining the size of the water manifold inlet or how it is related to the remainder of the claims since there are no limitations claimed between this inlet, the fitting and the around-the-pump system. If the negative limitation is further defining the size of the water manifold inlet, then such an inlet would be chosen depending on the size of the pump designed.

## (10) Response to Argument

In response to applicant's argument that in claims 1-8 and 17, the term "system" in the preamble for a method claim does not render the claims impermissibly indefinite, note that the examiner considered claims 1-8 and 17, to be apparatus claims as dictated by the preamble and since in the body of the claims apparatus type limitations were recited, i.e. "reservoir", "standard pump", "water manifold inlet", "around-the-pump line/system", and "fitting". The examiner did not construe from applicant's positively recited apparatus type preamble, "A fire fighting system", to be understood as "A method of using a fire fighting system comprising the steps of" or "A method of fighting a fire comprising the steps of".

In response to applicant's argument that claims 1-8 and 17 have been in the same format since filing and the Examiner first raises this objection in the Final office action, note that it is the applicant who first raises the issue in applicant's comments filed March 22, 2006, where it is stated that claims 1, 2, 5-8 and 17, recite both an apparatus(i.e. a fire fighting system) and the method steps of using the apparatus to fight a fire. This is the first time in the prosecution history that any use of the phrase "method steps" was used by the applicant. The examiner was only responding to the issue as it was raised by the applicant. Furthermore, this is a petitionable matter.

In response to applicant's argument that that in claims 1-8 and 17 the limitations began with gerunds, such as "adding", "attaching" and "pumping", note such phrases are not gerunds as grammatically written. Furthermore, gerunds are phrases that serve as nouns within the sentence structure. So, appellant is now further confusing the issue at hand because appellant is arguing

that these claims are meant to be apparatus claims because of their mistaken belief that these phrases are gerunds; but appellant is also arguing that they were meant to be method claims.

In response to applicant's arguments that claims 5 and 13 do not omit essential structured cooperative relationships "between the location of the line leading from the reservoir outlet to the manifold inlet and the suction side of the pump", note after reading the specification and reviewing the drawings, the examiner concluded that there were essential structural cooperative relationships between the reservoir outlet, the line leading from the reservoir outlet, the fitting, the water inlet manifold and the suction side of the pump. The recitations in claim 5 and 13, do not provide any cooperative relationship with the water manifold inlet, and from the drawings it appears that the fitting is either connected to the water manifold inlet or upstream of the water manifold inlet. From applicant's arguments it appears that the water manifold inlet is not considered to be an essential element of the invention.

In response to applicant's arguments that patentable weight should be given to the negative limitation "but no special approximately 2-1/2 inch inlet", note that the examiner considers that such a negative limitation does not appear to further limit the claim. Since applicant is claiming a standard pump, provides evidence and argues that standard pumps are not provided with 2-1/2 inch or pony inlets, it is not clear to the examiner the benefit of including such language, "but no special 2-1/2 inch inlet" in the claims. Since if applicant is claiming a standard pump that inherently does not include a 2-1/2 inch inlet, then it is redundant to include such language in the claims and does not fully capture what applicant considers to be the limitation or invention.

In response to applicant's arguments that the size of the water manifold inlet would not be a matter of mere design choice, note when first reviewing this limitation the examiner considered the negative limitation to be referring to the size of the water manifold inlet and not the pony inlet, since there were no further limitations relating this "no special 2-1/2 inch inlet" to the fitting or the around-the-pump system. It was the examiner's position that applicant was attempting to further define the size of the water manifold inlet and it is this reason for the examiner's assertion of "then such an inlet would be chosen depending on the size of the pump designed."

In response to applicant's arguments that Hollan et al does not disclose a standard pump having a water manifold inlet but no special approximate 2-1/2 inch inlet or a fitting/means for connecting at least initially separate from the standard pump, note that Hollan et al discloses a pump with a water manifold inlet 30 and a line 29 leading into the line 31 on the suction side of the pump. The examiner took the position that there must be a fitting provided at the location where the line 29 connects with the line 31, otherwise, how else would the two lines be fluidly connected. Applicant has not provided any support in the specification as to what type of fitting/means for connecting is used or has described the fitting/means for connecting to be of any special type. Also note that Hollan et al does not disclose that the line 29 leading into the line 31 is a pony inlet or a 2-1/2 inch inlet, so it is the examiner's position that the pump of Hollan et al has no special 2-1/2 inch inlet. As to the location of the connection of line 29 with the manifold, i.e locating the fitting upstream of the water inlet manifold, note the drawing only shows a schematic drawing of the line 29 leading into line 31 and the water manifold inlet 30. The location of the fitting could be located upstream of the water manifold inlet without

effecting the operation of the Hollan et al apparatus, since as disclosed it does not indicate that the connection of line 29 is downstream of the water manifold inlet only that it is connected to it, therefore, the examiner takes the position that with either location of the fitting upstream or downstream of the water manifold inlet the apparatus of Hollan et al would function properly.

In response to applicant's arguments that Gagliardo et al does not disclose a standard pump having a water manifold inlet but no special approximate 2-1/2 inch inlet, a large water reservoir or a fitting at least initially separate from the standard pump, note that Gagliardo et al discloses a pump 11 with an inlet 12 and a line 10 leading into the line 13 on the suction side of the pump. The examiner took the position that there must be a fitting provided at the location where the line 10 connects with the line 13, otherwise, how else would the two lines be fluidly connected. Applicant has not provided any support in the specification as to what type of fitting/means for connecting is used or has described the fitting/means for connecting to be of any special type. Also note that Gagliardo et al does not disclose that the line 10 leading into the line 13 is a pony inlet or a 2-1/2 inch inlet, so it is the examiner's position that the pump of Gagliardo et al has no special 2-1/2 inch inlet. As to the location of the connection of line 10 with the manifold, i.e locating the fitting upstream of the water inlet manifold, note the drawing shows a schematic drawing of the line 10 leading into line 13 upstream of the water inlet 12. The examiner takes the position that connection of the line 13 with the inlet 12 of the pump 11 would normally have some type of manifold in order to connect the pump with the water source. Applicant further supports this argument by admitting that the use of manifolds are common practice in fire fighting, see page 6, lines 25 and 26 of the appeal brief filed October 11, 2006. In addition it does not appear to the examiner that applicant considers the inclusion of a water

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manifold inlet as critical feature of the invention, since applicant argues that what is important to

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the invention is "locating the fitting in a line leading from the reservoir outlet to the suction side

of the pump" or "wherein the fitting is adapted to attach in a line located between the reservoir

outlet and the suction side of the pump". See page 7, lines 8-11. There is no mention of the

water manifold inlet being important to the claimed invention. As to the large water reservoir,

such fire trucks are known to carry separate suction hoses to connect to ponds, rivers, lakes etc.

for water supply and the Gagliardo et al apparatus would be capable of drawing water from such

large reservoirs. Also, in airports large water reservoirs(i.e. water tanks) are normally provided

on site to supply the water for fire fighting purposes, such that when a fire truck such as

Gagliardo et al is connect to a hydrant it would be supplied by a large water reservoir.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Steven J. Ganey

Kevin P. Shaver Klum P. Shaver Eric S. Keasel Luc Hannel